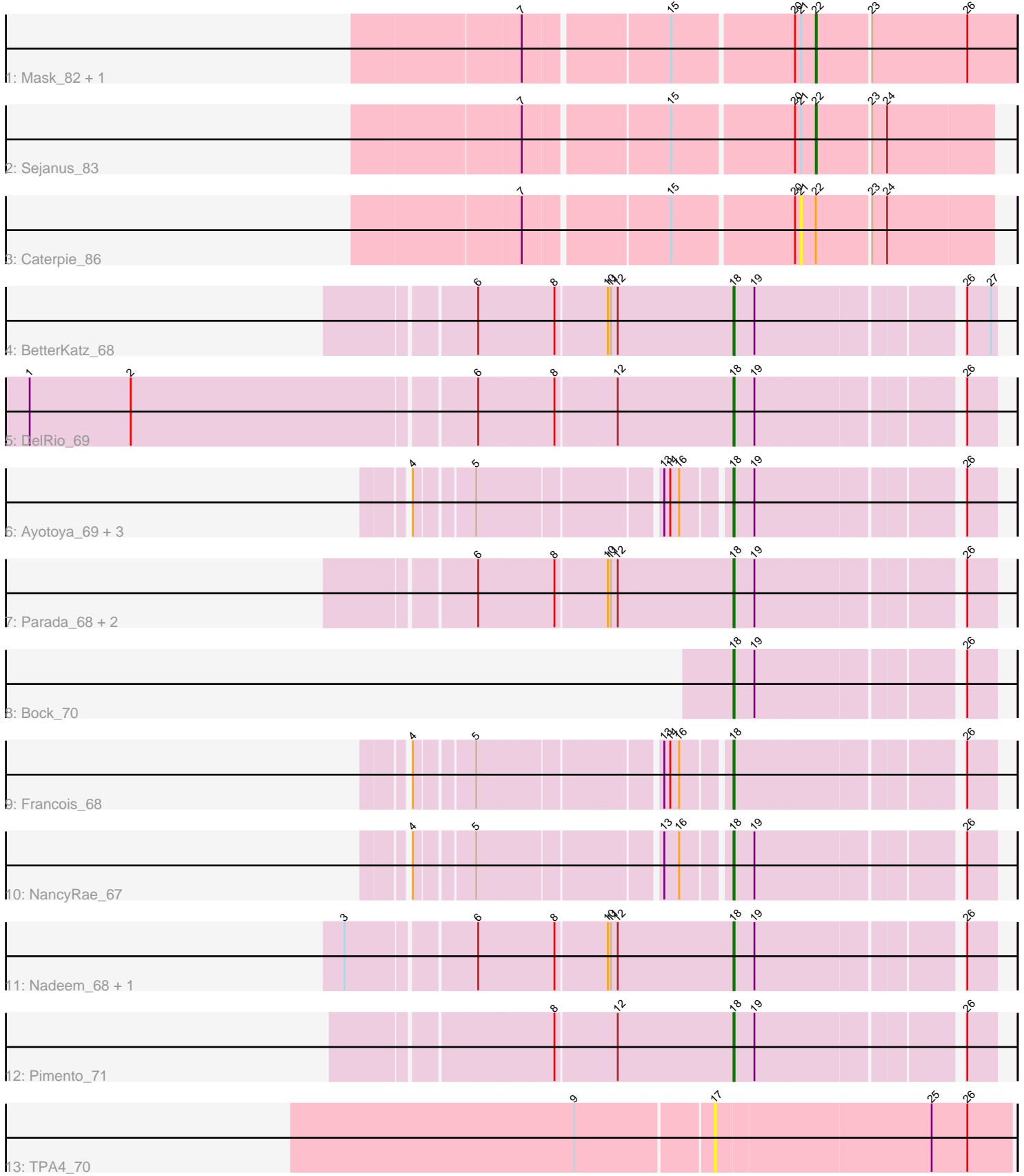


Pham 309310



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

## Pham 309310 Report

This analysis was run 06/27/26 on database version 652.

Pham number 309310 has 20 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Mask\_82, JohnLord\_82
- Track 2 : Sejanus\_83
- Track 3 : Caterpie\_86
- Track 4 : BetterKatz\_68
- Track 5 : DelRio\_69
- Track 6 : Ayotoya\_69, Hamood\_70, Chop\_70, GrandSlam\_70
- Track 7 : Parada\_68, Brylie\_68, Mulch\_68
- Track 8 : Bock\_70
- Track 9 : Francois\_68
- Track 10 : NancyRae\_67
- Track 11 : Nadeem\_68, WheatThin\_67
- Track 12 : Pimento\_71
- Track 13 : TPA4\_70

### ***Summary of Final Annotations (See graph section above for start numbers):***

The start number called the most often in the published annotations is 18, it was called in 15 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ayotoya\_69, BetterKatz\_68, Bock\_70, Brylie\_68, Chop\_70, DelRio\_69, Francois\_68, GrandSlam\_70, Hamood\_70, Mulch\_68, Nadeem\_68, NancyRae\_67, Parada\_68, Pimento\_71, WheatThin\_67,

Genes that have the "Most Annotated" start but do not call it:

- 

Genes that do not have the "Most Annotated" start:

- Caterpie\_86, JohnLord\_82, Mask\_82, Sejanus\_83, TPA4\_70,

### **Summary by start number:**

Start 17:

- Found in 1 of 20 ( 5.0% ) of genes in pham

- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TPA4\_70 (singleton),

Start 18:

- Found in 15 of 20 ( 75.0% ) of genes in pham
- Manual Annotations of this start: 15 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ayotoya\_69 (DI), BetterKatz\_68 (DI), Bock\_70 (DI), Brylie\_68 (DI), Chop\_70 (DI), DelRio\_69 (DI), Francois\_68 (DI), GrandSlam\_70 (DI), Hamood\_70 (DI), Mulch\_68 (DI), Nadeem\_68 (DI), NancyRae\_67 (DI), Parada\_68 (DI), Pimento\_71 (DI), WheatThin\_67 (DI),

Start 21:

- Found in 4 of 20 ( 20.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Caterpie\_86 (AD),

Start 22:

- Found in 4 of 20 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 75.0% of time when present
- Phage (with cluster) where this start called: JohnLord\_82 (AD), Mask\_82 (AD), Sejanus\_83 (AD),

### **Summary by clusters:**

There are 3 clusters represented in this pham: singleton, AD, DI,

Info for manual annotations of cluster AD:

- Start number 22 was manually annotated 2 times for cluster AD.

Info for manual annotations of cluster DI:

- Start number 18 was manually annotated 15 times for cluster DI.

### **Gene Information:**

Gene: Ayotoya\_69 Start: 44611, Stop: 44847, Start Num: 18

Candidate Starts for Ayotoya\_69:

(4, 44338), (5, 44389), (13, 44554), (14, 44560), (16, 44569), (Start: 18 @44611 has 15 MA's), (19, 44632), (26, 44818),

Gene: BetterKatz\_68 Start: 43711, Stop: 43947, Start Num: 18

Candidate Starts for BetterKatz\_68:

(6, 43465), (8, 43537), (10, 43585), (11, 43588), (12, 43594), (Start: 18 @43711 has 15 MA's), (19, 43732), (26, 43918), (27, 43942),

Gene: Bock\_70 Start: 43955, Stop: 44191, Start Num: 18

Candidate Starts for Bock\_70:

(Start: 18 @43955 has 15 MA's), (19, 43976), (26, 44162),

Gene: Brylie\_68 Start: 43534, Stop: 43770, Start Num: 18

Candidate Starts for Brylie\_68:

(6, 43288), (8, 43360), (10, 43408), (11, 43411), (12, 43417), (Start: 18 @43534 has 15 MA's), (19, 43555), (26, 43741),

Gene: Caterpie\_86 Start: 56528, Stop: 56713, Start Num: 21

Candidate Starts for Caterpie\_86:

(7, 56270), (15, 56405), (20, 56522), (21, 56528), (Start: 22 @56543 has 2 MA's), (23, 56594), (24, 56609),

Gene: Chop\_70 Start: 44799, Stop: 45035, Start Num: 18

Candidate Starts for Chop\_70:

(4, 44526), (5, 44577), (13, 44742), (14, 44748), (16, 44757), (Start: 18 @44799 has 15 MA's), (19, 44820), (26, 45006),

Gene: DelRio\_69 Start: 44721, Stop: 44957, Start Num: 18

Candidate Starts for DelRio\_69:

(1, 44037), (2, 44139), (6, 44475), (8, 44547), (12, 44604), (Start: 18 @44721 has 15 MA's), (19, 44742), (26, 44928),

Gene: Francois\_68 Start: 43819, Stop: 44055, Start Num: 18

Candidate Starts for Francois\_68:

(4, 43546), (5, 43597), (13, 43762), (14, 43768), (16, 43777), (Start: 18 @43819 has 15 MA's), (26, 44026),

Gene: GrandSlam\_70 Start: 44799, Stop: 45035, Start Num: 18

Candidate Starts for GrandSlam\_70:

(4, 44526), (5, 44577), (13, 44742), (14, 44748), (16, 44757), (Start: 18 @44799 has 15 MA's), (19, 44820), (26, 45006),

Gene: Hamood\_70 Start: 44799, Stop: 45035, Start Num: 18

Candidate Starts for Hamood\_70:

(4, 44526), (5, 44577), (13, 44742), (14, 44748), (16, 44757), (Start: 18 @44799 has 15 MA's), (19, 44820), (26, 45006),

Gene: JohnLord\_82 Start: 55608, Stop: 55805, Start Num: 22

Candidate Starts for JohnLord\_82:

(7, 55335), (15, 55470), (20, 55587), (21, 55593), (Start: 22 @55608 has 2 MA's), (23, 55659), (26, 55755),

Gene: Mask\_82 Start: 58615, Stop: 58812, Start Num: 22

Candidate Starts for Mask\_82:

(7, 58342), (15, 58477), (20, 58594), (21, 58600), (Start: 22 @58615 has 2 MA's), (23, 58666), (26, 58762),

Gene: Mulch\_68 Start: 43534, Stop: 43770, Start Num: 18

Candidate Starts for Mulch\_68:

(6, 43288), (8, 43360), (10, 43408), (11, 43411), (12, 43417), (Start: 18 @43534 has 15 MA's), (19, 43555), (26, 43741),

Gene: Nadeem\_68 Start: 43522, Stop: 43758, Start Num: 18

Candidate Starts for Nadeem\_68:

(3, 43156), (6, 43276), (8, 43348), (10, 43396), (11, 43399), (12, 43405), (Start: 18 @43522 has 15 MA's), (19, 43543), (26, 43729),

Gene: NancyRae\_67 Start: 43571, Stop: 43807, Start Num: 18

Candidate Starts for NancyRae\_67:

(4, 43298), (5, 43349), (13, 43514), (16, 43529), (Start: 18 @43571 has 15 MA's), (19, 43592), (26, 43778),

Gene: Parada\_68 Start: 43534, Stop: 43770, Start Num: 18

Candidate Starts for Parada\_68:

(6, 43288), (8, 43360), (10, 43408), (11, 43411), (12, 43417), (Start: 18 @43534 has 15 MA's), (19, 43555), (26, 43741),

Gene: Pimento\_71 Start: 43653, Stop: 43889, Start Num: 18

Candidate Starts for Pimento\_71:

(8, 43479), (12, 43536), (Start: 18 @43653 has 15 MA's), (19, 43674), (26, 43860),

Gene: Sejanus\_83 Start: 57471, Stop: 57641, Start Num: 22

Candidate Starts for Sejanus\_83:

(7, 57198), (15, 57333), (20, 57450), (21, 57456), (Start: 22 @57471 has 2 MA's), (23, 57522), (24, 57537),

Gene: TPA4\_70 Start: 45701, Stop: 45991, Start Num: 17

Candidate Starts for TPA4\_70:

(9, 45569), (17, 45701), (25, 45911), (26, 45947),

Gene: WheatThin\_67 Start: 43522, Stop: 43758, Start Num: 18

Candidate Starts for WheatThin\_67:

(3, 43156), (6, 43276), (8, 43348), (10, 43396), (11, 43399), (12, 43405), (Start: 18 @43522 has 15 MA's), (19, 43543), (26, 43729),